ACOM 2100

HF + 6 m Linear Amplifier



OUTSTANDING HF POWER PRODUCTS

www.acom-bg.com

MAIN FEATURES

EASY TO OPERATE

The plate-load True Resistance Indicator (TRI) is a powerful tuning aid which, together with the automatically controlled input attenuator, helps the operator to quickly and precisely match the antenna impedance to the optimum tube load impedance (5-10 seconds typically). The AUTO-OPERATE function (when enabled) maintains the amplifier in OPERATE mode for you, thus saving manual operations and time.

USER-FRIENDLY AND DURABLE

An amplifier that is both user-friendly, and that looks after itself. It is designed to safely withstand up to 400 W reflected power, up to 100 milliseconds duration of drive spikes, drive RF "tails" after a PTT or KEY release, operator's inadvertent tuning errors, etc.

The amplifier would also not cease to function with a "soft" AC mains and would deliver more than half power at only 85% of nominal mains voltage. It would withstand up to 10 milliseconds (down to zero) voltage drops, and up to +15% line voltage spikes, which is important particularly when used at Field Days, DXpeditions, and other portable operating events where emergency power is relied upon.



OLED COMMENT DISPLAY

All amplifier status indications are explained via detailed text displayed on the high brightness and contrast OLED display. The upper-line's strip on the display always reads peak forward power. LED indicators are provided for OPERATE mode, attenuation-on, transmit, selected antenna output, and ON/OFF conditions.

NO ANTENNA TUNER NEEDED

No heavy outboard antenna tuners required for antenna SWR up to 3:1 (and higher on some bands). Your amplifier will enable you to change antennas virtually instantaneously and allow you to use your antennas over wider frequency ranges.

THREE ANTENNA OUTPUTS

Three antenna outputs are selectable using a push-button on the front panel.

BROADBAND INPUT MATCHING

Resulting in a very good load to the transceiver over the entire spectrum from 1.8 MHz up to 54 MHz.

LESS NOISE IN THE SHACK

The input bypassing and the vacuum antenna relays are virtually silent even in the CW QSK mode thanks to specially designed mounting hardware.

TRANSCEIVER-INDEPENDENT

The amplifier operates without special signals from the transceiver - "Ground on TX" and 85 W RF drive power are sufficient.

SINGLE TUBE OPERATION

Uses a ceramic and metal radial beam tetrode with plate dissipation of 1000 W which is specially designed for class AB1 RF linear amplifier operation.

TUBE PROTECTION

Permanent monitoring and protection of plate and grid voltages and currents, reflected power as well as of the exhaust air temperature.

OUTPUT RF ARC PROTECTION

An output RF Arc protection is employed. This important feature safeguards the amplifier, antenna, antenna selector, and tuner against severe damage in case of possible breakdown.

CONTINUOUS MONITORING

Continuous monitoring and/or selectable measurement of the 12 most important parameters of the amplifier, exciter, and the selected antenna via OLED display.

EASY MAINTENANCE

Data (service information) regarding amplifier internal status is stored in a nonvolatile memory for 7 of the most recent auto protection trips.

SPECIFICATIONS

FREQUENCY COVERAGE

All amateur bands in the 1.8-54 MHz frequency range (extensions and/or changes on request)

POWER OUTPUT

1500 W PEP or continuous carrier, no mode limit

INTERMODULATION DISTORTION

Better than 32 dB below rated output

HUM AND NOISE

Better than 40 dB below rated output

HARMONIC OUTPUT SUPPRESSION

- 1.8-29.7 MHz - better than 50 dB below rated output
- 50-54 MHz - better than 66 dB below rated output

MAINS POWER SUPPLY VOLTAGE

85-132 VAC / 170-264 VAC (100, 110, 120, 200, 210, 220, 230 & 240 V nominal taps, +10% -15% tolerance), 50-60 Hz, Single phase

MAINS POWER CONSUMPTION

3500 VA at rated output

SAFETY AND ELECTROMAGNETIC COMPATIBILITY

Complies with CE safety and electromagnetic compatibility requirements, as well as with the US Federal Communications Commission (FCC) regulations



INPUT AND OUTPUT IMPEDANCES

- Nominal value: 50 Ohm unbalanced, UHF (SO-239) type connectors
- Input circuit: broadband, SWR less than 1.3:1, 1.8-54 MHz continuously (no tuning, no switching)
- Bypass path SWR less than 1.1:1, 1.8-54 MHz continuously
- Output (antenna) impedance matching capability: SWR up to 3:1 or higher at reduced output levels

RF GAIN

13.5 dB typically, frequency response less than 1 dB (50-85 W drive power for rated output)

SIZE & WEIGHT

- Operating (excluding connected cables) WxDxH: 445x375x205 mm, 29.3 kg (17.6x14.8x8.1 inches, 64.6 lbs.)
- Shipping
  - Amplifier carton, WxDxH: Approx. 610x490x380 mm, 17.0 kg (24.1x19.3x15.0 inches, 37.5 lbs.)
  - Transformer carton, WxDxH: Approx. 330x390x370 mm, 16.5 kg (13.0x15.4x14.6 inches, 36.4 lbs.)

OPERATING ENVIRONMENTS

- Temperature range: 0...+50 °C (32 °F to 122 °F)
- Relative air humidity: up to 95% @ +35 °C (95 °F)
- Height above sea level: up to 3050 m (10000 ft) without output deterioration

Dealer/Partner's address:



ACOM Ltd.

Bulgaria | Bozhurishte 2227
Sofia-Bozhurishte Industrial Park | 6 Valeri Petrov Str.
GPS coordinates: 42.748616° | 23.209801°

info@acom-bg.com

www.acom-bg.com

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